

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
LUFKIN DIVISION

SCICOTECH GmbH	§	
	§	
<i>Plaintiff/Counterclaim Defendant,</i>	§	
	§	Civil Action No. 9:07-CV-76
v.	§	
	§	
BOSTON SCIENTIFIC CORPORATION and	§	JUDGE RON CLARK
BOSTON SCIENTIFIC SCIMED, INC.	§	
	§	
<i>Defendants/Counterclaim Plaintiffs</i>	§	

**MEMORANDUM OPINION AND ORDER CONSTRUING CLAIM TERMS OF  
UNITED STATES PATENT NO. 5,102,403**

Plaintiff SciCoTech GmbH (“SCT”) filed suit against Defendants Boston Scientific Corporation and Boston Scientific SciMed, Inc. (collectively, “BSC”) claiming infringement of United States Patent No. 5,102,403 (“the ‘403 patent”).

The court conducted a *Markman* hearing on April 10, 2008 to assist the court in interpreting the meaning of the claim terms in dispute. Having carefully considered the patents, the prosecution history, the parties’ briefs, and the arguments of counsel, the court now makes the following findings and construes the disputed claim terms.<sup>1</sup>

**I. CLAIM CONSTRUCTION STANDARD OF REVIEW**

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S. Ct. 1384 (1996) (“*Markman II*”). “The duty of the trial judge is to determine the meaning of the claims at issue, and to instruct the jury accordingly.” *Exxon Chem. Patents, Inc.*

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<sup>1</sup> The transcript of the hearing contains a number of representations and agreements of the parties and their answers to technical questions from the court, all of which will not be repeated here, but which assisted the court in reaching the conclusions set out in this Order. This Order governs in the event of any conflict between the Order and the court’s preliminary analysis at the hearing. The transcript will be cited as Tr. p. \_\_ ll. \_\_.

*v. Lubrizoil Corp.*, 64 F.3d 1553, 1555 (Fed. Cir. 1995) (citations omitted), *cert. denied*, 518 U.S. 1020, 116 S.Ct. 2554 (1996).

“‘[T]he claims of the patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005)(*en banc*)(citation omitted), *cert. denied*, 546 U.S. 1170, 126 S.Ct. 1332 (2006). “Because the patentee is required to ‘define precisely what his invention is,’ it is ‘unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms.’” *Phillips*, 415 F.3d at 1312 (quoting *White v. Dunbar*, 119 U.S. 47, 52 (1886)).

The words of a claim are generally given their ordinary and customary meaning. *Phillips* 415 F.3d at 1312. The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.”<sup>2</sup> *Id.* at 1313. Analyzing “how a person of ordinary skill in the art understands a claim term” is the starting point of a proper claim construction. *Id.*

A “person of ordinary skill in the art is deemed to read the claim term not only in context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313. Where a claim term has a particular

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<sup>2</sup> Based on the patents and their cited references, the tutorials, and the representations of the parties at the hearing, the court finds that “one of ordinary skill in the art” covered by this patent is someone with the equivalent of a medical degree from an accredited institution (usually denoted in this country as a M.D. degree) or someone with the equivalent of a masters degree from an accredited institution (usually denoted in this country as an M.S. degree) in biomedical engineering. The person must have at least three years of experience working as an interventional cardiologist, interventional radiologist, cardiothoracic surgeon, interventionalist, or biomedical engineer or biomedical device designer and/or manufacturer. Extensive experience and technical training might substitute for educational requirements, while advanced degrees might substitute for experience.

meaning in the field of art, the court must examine those sources available to the public to show what a person skilled in the art would have understood the disputed claim language to mean. *Id.* at 1414. Those sources “include ‘words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.’” *Id.* (citation omitted).

“[T]he ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314. In these instances, a general purpose dictionary may be helpful. *Id.*

However, the Court emphasized the importance of the specification. “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). A court is authorized to review extrinsic evidence, such as dictionaries, inventor testimony, and learned treatises. *Phillips*, 415 F.3d at 1317. But their use should be limited to edification purposes. *Id.* at 1319.

The intrinsic evidence, that is, the patent specification, and, if in evidence, the prosecution history, may clarify whether the patentee clearly intended a meaning different from the ordinary meaning, or clearly disavowed the ordinary meaning in favor of some special meaning. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979-80 (Fed. Cir. 1995); *aff’d*, 517 U.S. 370, 116 S.Ct. 1384 (1996). Claim terms take on their ordinary and accustomed meanings unless the patentee demonstrated “clear intent” to deviate from the ordinary and accustomed meaning

of a claim term by redefining the term in the patent specification. *Johnson Worldwide Assoc., Inc. v. Zebco Corp.*, 175 F.3d 985, 990 (Fed. Cir. 1999).

The “‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Phillips*, 415 F.3d at 1321. However, the patentee may deviate from the plain and ordinary meaning by characterizing the invention in the prosecution history using words or expressions of manifest exclusion or restriction, representing a “clear disavowal” of claim scope. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed. Cir. 2002). If the patentee clearly intended to provide his own definitions, the “inventor’s lexicography governs.” *Phillips*, 415 F.3d at 1316.

## **II. PATENT BACKGROUND AND TECHNOLOGY**

The ‘403 patent describes a catheter used in coronary angioplasty, a procedure for treating blockages of the coronary arteries that deliver blood to the heart. A balloon catheter is a long, thin tube with a small inflatable balloon near its tip. In interventional cardiology procedures, a guide wire is inserted into the patient and advanced to the site of a stenosis (where the artery is blocked by plaque). A balloon catheter travels over the guide wire until it reaches the blockage. There, the balloon is inflated, pushing the plaque back against the artery wall, which makes more room for blood to flow through the artery.

In prior art systems called “rapid-exchange” catheters, catheters and guide wires tended to bend and kink, making advancement within the vessels more difficult. The catheters also had an abrupt transition of the catheter lumen at friction areas (balloon site, guide wire entry site) that increased the risk of damage to vessel walls. Moreover, the

previous systems were unable to provide a sufficiently stiff profile for getting past lesions while maintaining sufficient flexibility to navigate bends and turns in blood vessels.

The '403 patent, which issued from an application filed on June 18, 1990, describes a catheter with an outer wall that changes gradually while passing through successive configurations at the more distal end. The substantially cylindrical outer wall becomes grooved to guide a guide wire alongside toward the interior of the catheter without any significant bending of the wire. This groove becomes a crescent-shaped wall-lumina configuration which partially encompasses the guide wire before becoming cylindrical to surround the guide wire. Such a catheter allegedly overcomes problems associated with earlier rapid-exchange catheters.

### III. CLAIM CONSTRUCTION<sup>3</sup>

The parties have grouped the disputed terms according to the substance of their dispute.

**1. The “Substantially Cylindrical Catheter Body” Elements.** Used in '403 patent, claims 1, 9, 11, 12, 14-16, 18, 19 and 22.

SCT argues that no construction is necessary, but if the court is to construe the terms, then it should be construed as “substantially tubular catheter body.” BSC proposes: “a cylindrical catheter body that is formed of a single material and that is of substantially constant diameter without abutments or steps.” BSC’s construction adds two limitations: 1) that the body be of “substantially constant diameter without abutments or steps,” and 2) that the body be “formed of a single material.”

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<sup>3</sup>The agreed definitions are set out in a separate order entered contemporaneously with this one.

a. Substantially Constant Diameter Without Abutments or Steps

The claim construction inquiry begins with the actual words of the claim. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1248 (Fed. Cir. 1998). A textual “hook” in the claim language is required for BSC’s limitation to be imposed. *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1310 (Fed. Cir. 2005). Generally, “a party wishing to use statements in the written description to confine or otherwise affect a patent’s scope must, at the very least, point to a term or terms in the claim with which to draw in those statements.” *Renishaw*, 158 F.3d at 1248. “If we once begin to include elements not mentioned in the claim in order to limit such claim . . . we should never know where to stop.” *NTP, Inc.*, 418 F.3d at 1310 (quoting *McCarty v. LeHigh Valley R. Co.*, 160 U.S. 110, 116, 16 S.Ct. 240 (1895)).

BSC does not point to any textual hook in the claim language to justify the limitation it urges. Instead, BSC cites only to a portion of the specification and to Figure 8. BSC states that “any layperson looking at Figure 8 [ ] could very well conclude that the body was ‘substantially cylindrical’ and, in comparison with cross-sections around it, of ‘substantially constant diameter.’” BSC argues that the specification explains:

By having a common circumferential plastic body about the dilatation lumen cavity smoothly an [sic] progressively changing along the catheter length into an interior guide wire lumen *without abutments or steps in the catheter diameter*, many problems of exerting distortion forces on the catheter or balloon surface for reaching treatment sites are eliminated. ‘403 patent, col. 5, ll. 7-13 (emphasis added).

BSC admits, and the court agrees, that the passage of the specification discussing a guide wire lumen without abutments or steps is for a “Preferred Embodiment of the ‘403 Patent.” Def.’s Claim Constr. Br., [Doc. #50, p. 38]. Occasionally, specification explanations

may lead one of ordinary skill to interpret a claim term more narrowly than its plain meaning suggests. Yet the Federal Circuit repeatedly warns against confining claims to a few specification statements or figures into the claims. *Computer Docking Station, Corp. v. Dell, Inc.*, --- F.3d ----, 2008 WL 752675 (Fed. Cir. 2008). While the specification depicts an embodiment of a guide wire lumen without any abutments or steps, to limit all catheter bodies to such an embodiment would impermissibly limit the invention. *See AGFA Corp. v. Creo Prods., Inc.*, 451 F.3d 1366, 1376 (Fed. Cir. 2006)(citing *Phillips*, 415 F.3d at 1323).

Moreover, claim 11 contains an explicit limitation for the catheter to have a substantially cylindrical body of substantially constant diameter. If the patentee meant to define a catheter body to be a substantially cylindrical body of substantially constant diameter in all claims, he certainly knew how to do so.

BSC next argues that in the Request for Reexamination of the '403 patent, SCT urged a narrow definition of "catheter body" to distinguish over the Piccolino catheter.<sup>4</sup> BSC points to statements made by the inventor, Dr. Eckhard Alt, discussing that the Piccolino catheter was not substantially cylindrical or of substantially constant diameter. Dr. Alt stated:

Therefore, the feature of the invention of keeping a "substantially constant" outer diameter by indenting the inflation lumen and creating a guide wire and structure gradually changing the groove into a lumen is not met by the Piccolino catheter. Def.'s Claim Constr. Br., Exh. 4, ¶ 23 [Doc. #50, Attachment #4, p. 10].

For a prosecution statement to prevail over the plain language of the claim, the statement must be so clear and unmistakable such that the public should be entitled to rely on it as a "definitive statement[ ] made during prosecution. *Omega Engineering, Inc. v. Raytek*

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<sup>4</sup>("Piccolino") Product packaging for "Schneider Monorail Piccolino Percutaneous Transluminal Coronary Angioplasty (PCTA) Catheter," along with U.S. Patent No. 4,762,129.

*Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). There is no “clear and unmistakable” disclaimer “if a prosecution argument is subject to more than one reasonable interpretation, one of which is consistent with a proffered meaning of the disputed term.” *SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1287 (Fed. Cir. 2005).

A careful reading of the prosecution history leaves little doubt that the distinctions between the invention and Piccolino are more extensive than the shape of the catheter body. The applicant distinguished his invention in multiple ways throughout a 7-page claim chart. Of course, a disavowal, if clear and unambiguous, can lie in a single distinction among many. However the “totality of the prosecution history” informs the disavowal inquiry. *Rheox, Inc. v. Entact, Inc.*, 276 F.3d 1319, 1326 (Fed. Cir. 2002).

Here, the applicant did not distinguish the invention solely on the basis that the catheter body has a substantially constant diameter without abutments or steps. In contrast, the applicant in these statements distinguished his invention on the basis that the Piccolino has a transition zone that tapers down “rather abruptly, possibly by indentation.” Def.’s Claim Constr. Br., Exh. 4, ¶ 8 [Doc. #50, Attachment #4, p. 5]. The court will decline to import the limitation that the body be of “substantially constant diameter without abutments or steps.”

b. Formed of a Single Material

BSC states that SCT relinquished its position that the catheters in the ’403 patent may be formed with the addition of another material based on the arguments made to distinguish the Piccolino reference during reexamination. Acknowledging that this limitation does not appear in the claim language, BSC supports its position by pointing to the alleged disclaimers made by SCT during its request for reexamination of the ’403 patent.



In his Request for Reexamination, Dr. Alt stated that “the guide wire lumen in the Piccolino catheter is formed through the *addition of material* outside of, and alongside of, the catheter body, an approach that runs directly afoul of the teachings of the ‘403 patent.” Def.’s Claim Constr. Br., Exh. 5, p. 8 [Doc. #50, Attachment #5, p. 11]. It is difficult to imagine a more explicit disclaimer when one says that a certain process “runs directly afoul of the teachings of the ‘403 patent.” In fact, Dr. Alt repeatedly told the PTO that its invention does not have a “build-up of additional material added to the catheter body.” Def.’s Claim Constr. Br., Exh. 4, ¶ 23 [Doc. #50, Attachment #4, p. 10]. The inescapable consequence of such statements is that the scope of SCT’s claims cannot cover the use of any additional material used to form the guide wire lumen in the catheter.

The court cannot, however, accept BSC’s position that “no additional material” means “no addition of *another* material.” The key difference between Dr. Alt’s disclaimer and BSC’s proposal is that Dr. Alt did not limit his invention to a catheter that uses a *single* material. Although “different material” appears in a number of places in the prosecution history, and Dr. Alt observed that the Piccolino reference is made out of various materials, Dr. Alt did not expressly disclaim the use of a second material in the catheter of the ‘403 patent or distinguish his invention on the basis that it was formed of a single material. This court declines to import BSC’s proposed limitations into this claim term.

Accordingly, the court finds that the term “substantially cylindrical catheter body” means: **substantially cylindrical catheter body.**

**2. The “Guide Wire Lumen” Elements.** Used in ‘403 patent, claims 1, 5, 9, 11, 12, 14-16, 18, 19, 22 and 24.

For each of the claims discussing the guide wire lumen, BSC proposes to add the phrase “without the addition of another material.” SCT argues that no construction is necessary.

The points of contention in these claim terms substantially replicate the dispute surrounding the previous term. BSC again cites to the Request for Reexamination and Dr. Alt’s supporting declaration. For the reasons discussed above, the court will define this terms as follows:

“and which thereafter changes into a closed cylinder wall surrounding a second guide lumen” means:

**and which thereafter changes into a closed cylinder wall surrounding a second guide lumen without the addition of material.**

**3. The “Gradually” Elements.** Used in the ‘403 patent, claims 1, 9, 11, 12, 14-16, 18, 19, 22 and 24.

SCT argues that no construction of the “gradually” elements is required. If construction is needed, SCT proposes “smoothly and progressively.” BSC states that “gradually” means “smoothly and progressively changing in shape along the catheter body length, across a distance of substantially more than four millimeters.”

The parties agree that the independent claims of the ‘403 patent calls for a longitudinal groove, which changes gradually into a lumen within the catheter body. The problem with BSC’s use of the term “gradually” is that there is no claim language or portion in the specification which limits the transition to a distance of substantially more than four

millimeters. Although Figure 1 and Figures 3-7 describe a progression that takes place over a distance of approximately 60 to 90 millimeters, a claim is not to be narrowly construed to conform it to a particular embodiment. *See Phillips*, 415 F.3d at 1323 (noting that “although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”)

BSC predicates its construction primarily on Dr. Alt’s reexamination declaration, which refers to the length of the Piccolino catheter. In particular, Dr. Alt states that the Piccolino catheter has a substantially uniform groove with no visible change over the distance of 3.5 mm - 4 mm. Def.’s Claim Constr. Br., Exh. 4, ¶ 9-12 [Doc. #50, Attachment #4, p. 5-6]. These paragraphs of the Request for Reexamination, however, do not support a conclusion that Dr. Alt or SCT clearly and unmistakably disclaimed all lengths of transition under 4 mm. Dr. Alt was simply making observations of the Piccolino catheter and making the broader point that it does not have a gradual transition at all. *See* Def.’s Claim Constr. Br., Exh. 4, ¶ 22 [Doc. #50, Attachment #4, p. 9] (“The Piccolino catheter does not provide a structure that gradually changes from a groove into a lumen.”) BSC has transformed a readily understood adjective into a complicated phrase with narrow limits. Accordingly, the court will define this term as follows:

“Gradually” means: **smoothly and progressively.**

**4. The “Substantially Parallel” Guide Wire Elements.** Used in the ’403 patent, claims 1, 9, 11, 12, 14, 15, 18, 19, 22 and 24.

BSC proposes to describe the guide wire as always being “substantially parallel.”

SCT argues that no construction is necessary.

Due to the paucity of BSC's briefing on this subject, it is difficult to discern where BSC finds support in the specification for adding such a limitation into each claim that discusses a guide wire. It is well established that although substantially parallel guide wire may be a feature of a preferred embodiment, it is not necessarily incorporated into all of the claims. *AllVoice Computing v. Nuance Communications, Inc.*, 504 F.3d 1236, 1248 (Fed. Cir. 2007). Despite the lack of briefing by BSC, the court pawed through the patent and found that claim 9 of the '403 patent specifically claims a "substantially parallel disposed guide wire," which leads to the presumption that other claims do not specifically recite a "substantially parallel" guide wire. *See AllVoice Computing*, 504 F.3d at 1248. The overarching, and ultimately fatal, flaw with BSC's position is that it requires the court to render meaningless or superfluous the words "substantially parallel" if "wire" or "guide wire" were also construed as "substantially parallel." The court rejects BSC's arguments and declines to construe these terms.

**5. The "Groove" Elements.** Used in '403 patent, claims 1, 9, 11, 12, 14-16, 18, 19, 22 and 24.

BSC proposes to include in the definition of "catheter body" the aspect of the invention requiring the gradual transformation of the catheter body to form the guide wire lumen. For example, BSC proposes the following constructions:

[claim 9] "forming an internal catheter guide wire lumen by changes of shape of the cylindrical catheter body gradually over said length from a guide wire entry groove indented on the catheter outer surface into the internal lumen encompassing the guide wire" means:

"forming an internal catheter guide wire lumen, by changes of shape to the cylindrical body across a distance of substantially more than four millimeters, from a guide wire entry groove indented on the catheter outer surface which is

transformed into a deeper groove partly surrounding the wire before forming a semi-enveloping configuration around the guide wire, which then transforms into the internal lumen encompassing the guide wire . . .”

BSC’s construction describes the transition from one to two lumens by emphasizing that the sidewall of the catheter body deforms from a shallow groove into a “deeper” groove. BSC points to SCT’s Request for Reexamination, which explains that

the sidewall of catheter body 26 begins to deform, creating at first a shallow groove in which the guide wire rests (Figure 4), then a deeper groove (Figure 5), then a ‘crescent shaped wall lumina configuration’ (Figure 6), and finally a closed, second internal lumen defined within the catheter body (Figure 7). Def.’s Claim Constr. Br., Exh. 3, p. 4 [Doc. #50, Attachment #5, p. 6].

SCT argues that BSC is not attempting to define terms, but instead is attempting to pick and choose language from the prosecution history to insert in the claim language and, therefore, narrow it. SCT further argues that BSC’s “purported construction introduces relative terminology—‘*deeper* groove’—that is confusing without a point of reference (deeper than what?).” Pl’s Claim Constr. Br., p. 23 [Doc. #46, p. 29]. This is true in claims 1 and 14 because the disputed terms discuss a single groove without comparing it to any other groove. However, in claims 9 and 11, the disputed terms discuss the *process* of forming the guide wire lumen. In those claims, SCT’s statements discussing the gradual transformation of a catheter from one lumen to two lumens are applicable.

As with BSC’s construction of the “gradually” elements, there is insufficient support in the intrinsic or extrinsic evidence to add a distance limitation (“substantially more than four millimeters”) to the “groove” elements.

Further, BSC’s proposed language is from the statement in support of the request for reexamination and was an attempt by SCT to explain the gradual transformation of the

catheter in accordance with the teachings of the ‘403 patent. Importantly, SCT uses this language to guide the examiner through Figures 3 through 10 of the ‘403 patent and states that the gradual transformation is “best and readily observed” in this manner.

However, it is important to note the figures relate to a preferred embodiment of the invention and should not be imported into the claim. It is axiomatic that courts should avoid importing limitations from the specification into the claim terms, absent a clear disclaimer of claim scope. *Phillips*, 415 F.3d at 1323. Only where the specification used language of requirement, rather than preference, will the specification describe an essential step or element of the claim rather than merely a preferred embodiment. *See Anderson Corp. v. Fiber Composites, Inc.*, 474 F.3d 1361, 1372-73 (Fed. Cir. 2007).

This particular statement describing the transformation is not a clear disavowal of other ways in which the lumen may be transformed; is a narrative description of the preferred embodiment; and does not serve to define the terms in the claim. No construction is necessary.

### **MEANS-PLUS-FUNCTION CLAUSES**

The remaining terms the parties ask the court to construe involve means-plus-function clauses under 35 U.S.C. § 112(6). Where a claim includes the word “means,” a presumption is invoked that § 112(6) applies. *See Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1248 (Fed. Cir. 2005). This presumption may be rebutted if the claim recites “sufficient structure for performing the claimed function . . . .” *Id.*

Determining the claimed function and the corresponding structure of means-plus-function clauses are matters of claim construction, so it is appropriate to deal with these issues at the *Markman* stage. *WMS Gaming Inc., v. Int’l Game Tech.*, 184 F.3d 1339 (Fed. Cir.

1999). Claim construction of a means-plus-function limitation involves two steps. *See Medical Instrumentation and Diagnostics v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003). The court must first identify the particular claimed function, and then look to the specification and identify the corresponding structure for that function. *Id.* “Under this second step, ‘structure disclosed in the specification is corresponding structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.’” *Id.* (citations omitted). “While corresponding structure need not include all things necessary to enable the claimed invention to work, it must include all structure that actually performs the recited function.” *Default Proof Credit Card System, Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005).

**1. “Guide wire means.”** Used in ‘403 patent, claim 11.

BSC proposes that the function to this phrase is “guiding a catheter to a treatment site,” and the structure is “a guide wire.” SCT does not appear to dispute BSC’s proposal.

After reviewing the patent and prosecution history, the court adopts BSC’s proposal.

**2. “Treatment means.”** Used in ‘403 patent, claim 11.

BSC argues that the function of this element is “to treat an occluded blood vessel” and the structure is “a balloon dilation catheter.” SCT states that the function is “for insertion into the treatment site” and the structure is any one of the following

- (a) “a cylindrical plastic catheter with a distal end portion movable over a guide wire to a treatment site” [Abstract];
- (b) “a dilatation catheter movable along coronary blood vessels upon a guide wire” (col. 1, ll. 8-10);
- (c) “an inflatable dilatation catheter” (col. 2, ll. 61-62);

- (d) “a cylindrical catheter tubing with outer plastic wall” (col. 3, ll. 3-4);
- (e) “a lateral modulus with sufficient elasticity to bend around sharp curves in vessels” (col. 3, ll. 41-44);
- (f) “a circumferential plastic body” (col. 5, l. 7);
- (g) “a balloon dilatation catheter” (col. 5, ll. 14-15); or
- (h) an equivalent of any of the above.

The Federal Circuit guides the court when seeking the function of a means-plus-function limitation: “[t]he function of a means-plus-function limitation . . . must come from the claim language itself.” *See Creo Prods. v. Presstek, Inc.*, 305 F.3d 1337, 1344 (Fed. Cir. 2002). BSC’s proposed construction is unsupported by the claim language, and instead introduces a new function. The court agrees with SCT’s identification of the function, which is derived straight from the claim language.

BSC’s identification of structure is incomplete. Although a balloon dilation catheter does perform the recited function, the ’403 patent also discloses a number of alternative corresponding structure for performing “insertion into the treatment site.” BSC did not rebut SCT’s proposed structures either in the briefing or at the *Markman* hearing.

The court finds that the function for “treatment means” is “for insertion into the treatment site” and the structures are those identified by SCT, listed above.

**3. “Means for retention of the guide wire substantially within the catheter outer perimeter.”** Used in ’403 patent, claim 12.

BSC states that the function for this claim term is “retaining or holding a guide wire within the catheter body” and the structure is “a guide wire lumen.” SCT contends that this means-plus-function element is non-limiting and needs no construction. In the alternative,



SCT argues that the function is “for retention of the guide wire substantially within the catheter outer perimeter.” SCT also proposes that the structure consists of:

- (a) “a guiding groove in the catheter” (Abstract, col. 6, l. 13);
- (b) “an internal lumen which is adapted to at least partly surround a guide wire” (col. 4, ll. 40-41);
- (c) “a riding saddle for a guide wire” (col. 4, ll. 2-5);
- (d) “a guiding lane for a guide wire” (col. 5, l. 55); or
- (e) an equivalent of any of the above.


SCT argues that the body of claim 12 is independently complete on its face and does not rely on the recitation of the “means for retention” phrase in the preamble. When considering whether a preamble limits a claim, the court must analyze the preamble to ascertain whether it states a “necessary and defining aspect of the invention,” or is simply “an introduction to the general field of the claim.” *On Demand Mach. Corp. v. Ingram Indus.*, 442 F.3d 1331, 1343 (Fed. Cir. 2006).

It is true that in this case, the body of the claim contains structure of the invention. But “where the ‘claim drafter chooses to use *both* the preamble *and* the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.” *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995). The claim and specification indicate that the protected invention here consists of a means to retain or hold a guide wire within the catheter body. *See* ‘403 patent, Abstract, col. 6, l. 13; col. 4, ll. 33-41; col. 5, 54-61. Thus, the preamble limits the structure described in claim 12.

The alternate function proposed by SCT has insubstantial differences from the function proposed by BSC. The court therefore finds that the function of this means-plus-function element is “retention of the guide wire substantially within the catheter outer perimeter.”

For the same reasons discussed above, BSC’s proposed structure is deficient and incomplete. Corresponding structure for the recited function can also be found in the Abstract, col. 4, ll. 2-5, col. 4, ll. 40-41, col. 5, ll. 55 and col. 6, l. 13. BSC did not dispute this at the *Markman* hearing. Accordingly, the court adopts SCT’s list of structure.

**SIGNED this the 29th day of August, 2008.**

A handwritten signature in black ink, appearing to read "Keith F. GIBLIN", written over a horizontal line.

KEITH F. GIBLIN  
UNITED STATES MAGISTRATE JUDGE